

IN THE CLAIMS

Please amend the claims as follows:

1. (Previously presented): A process for manufacturing a steel strip with low aluminum content, comprising: hot-rolling a steel strip comprising between 0.050 and 0.080% by weight of carbon, between 0.25 and 0.40% by weight of manganese, less than 0.020% by weight of aluminum, and between 0.010 and 0.014% by weight of nitrogen, the remainder being iron and inevitable trace impurities, to form a strip;

subjecting said strip to a first cold-rolling, to produce a cold-rolled strip;

annealing said cold-rolled strip, to form an annealed cold-rolled strip;

subjecting said annealed cold-rolled strip to a secondary cold-rolling;

wherein said annealing is a continuous annealing comprising:

raising the temperature of the strip to a temperature higher than the temperature of onset of pearlitic transformation Ac_1 ,

holding the strip above this temperature for a duration of longer than 10 seconds,

rapidly cooling the strip to a temperature below 100°C at a cooling rate in excess of 100°C per second,

thermally treating the strip at a low temperature ranging between 100°C and 300°C for a duration in excess of 10 seconds, and

cooling the strip to room temperature.

2. (Currently Amended): The process according to claim 1, further comprising performing ~~wherein after said rapidly cooling and prior to said thermally treating,~~ a plastic deformation operation ~~is performed~~ comprising an elongation of the strip with a percentage

elongation ranging between 1 and 5% after said rapidly cooling step and prior to said thermally treating step.

3. (Previously Presented): The process according to claim 1, wherein the strip is maintained during said annealing at a temperature between said A_c , and 800°C for a duration ranging from 10 seconds to 2 minutes.

4. (Previously Presented): The process according to claim 1, wherein said rapidly cooling is carried out at a rate between 100°C and 500°C per second.

5. (Previously Presented): The process according to claim 1, wherein said thermal treatment comprises maintaining the strip at low temperature ranging between 100°C and 300°C for a duration ranging between 10 seconds and 2 minutes.

6. (Previously Presented): The process according to claim 2, wherein said plastic deformation operation by elongation of the strip comprises planishing under traction.

7. (Previously Presented): The process according to claim 2, wherein said plastic deformation operation by elongation of the strip comprises rolling.

8. (Currently Amended): ~~The process~~ A process of manufacturing a container comprising forming the container comprising the steel strip produced by the process according to claim 1.

~~1, further comprising manufacturing a container with said steel strip.~~

9. (Currently Amended) A steel strip, produced by a process comprising:

hot-rolling a steel strip comprising between 0.050 and 0.080% by weight of carbon, between 0.25 and 0.40% by weight of manganese, less than 0.020% by weight of aluminum, and between ~~0.008 and 0.016%~~ 0.010 and 0.014% by weight of nitrogen, the remainder being iron and inevitable trace impurities, to form a strip;

subjecting said strip to a first cold-rolling;

annealing said cold-rolled strip;

subjecting said annealed strip to a second cold-rolling;

wherein said annealing is a continuous annealing comprising:

raising the temperature of the strip to a temperature higher than the temperature of onset of pearlitic transformation Ac_1 ,

holding the strip above this temperature for a duration of longer than 10 seconds,

rapidly cooling the strip to a temperature below 100°C at a cooling rate \geq greater than or equal to 100°C per second,

thermally treating the strip at a low temperature ranging between 100°C and 300°C for a duration in excess of 10 seconds, and

cooling the strip to room temperature.

10. (Currently Amended) A steel sheet with low aluminum content, comprising:

between 0.050 and 0.080% by weight of carbon,

between 0.25 and 0.40% by weight of manganese,

less than 0.020% by weight of aluminum, and

between ~~0.008 and 0.016%~~ 0.010 and 0.014% by weight of nitrogen, the remainder being iron and inevitable trace impurities,

wherein when in an aged condition said sheet comprises a ductility measured in tensile tests as percentage elongation A% satisfying the relationship:

$$(750 - R_m)/16.5 \leq A\% \leq (850 - R_m)/17.5$$

where R_m is the maximum rupture strength of the steel, expressed in MPa.

11. (Currently Amended) The steel sheet according to claim 10, wherein said steel sheet further comprises ~~further~~:

COTTRELL atmospheres and/or epsilon carbides.

12. (Previously Presented) A container, comprising the steel sheet according to claim 10.

13. (Previously Presented) The steel sheet according to Claim 10, wherein said steel sheet further comprises:

a grain count per mm² greater than 30,000.

14. (Currently Amended) The steel sheet according to Claim 10, comprising:

between 0.055 and 0.075% by weight carbon,

between 0.27 and 0.37% by weight manganese,

less than 0.015% by weight aluminum, and

between ~~0.009 and 0.014%~~ 0.010 and 0.014% by weight nitrogen.

15. (Previously Presented) The steel sheet according to Claim 10, comprising:

between 0.060 and 0.070% by weight carbon,

between 0.30 and 0.35% by weight manganese,

less than 0.010% by weight aluminum, and
between 0.010 and 0.012% by weight nitrogen.

16. (Canceled)

17. (Previously Presented) The steel sheet according to Claim 10, wherein said steel sheet further comprises:

a gram count per mm² greater than 40,000.

18. (Currently Amended) The steel sheet produced by the process according to Claim 9, further comprising performing ~~wherein after said rapidly cooling and prior to said thermally treating,~~ a plastic deformation operation ~~is performed~~ comprising an elongation of the strip with a percentage elongation ranging between 1 and 5% after said rapidly cooling step and prior to said thermally treating step.